

Title (en)
GAS TURBINE ENGINE

Title (de)
GASTURBINENTRIEBWERK

Title (fr)
TURBINE À GAZ

Publication
EP 3444468 B1 20211208 (EN)

Application
EP 18183848 A 20180717

Priority
GB 201712993 A 20170814

Abstract (en)
[origin: EP3444468A1] An aircraft gas turbine engine (10) comprises a fan (16) coupled to a fan drive turbine (26), the fan (14) being configured to provide a bypass flow (B) and a core flow (A) in use. The engine (10) includes a reduction gearbox (36) which couples the fan (16) to the fan drive turbine (26) and a core compressor arrangement (18, 20). The core compressor arrangement (18, 20) has a core inlet (38) at an upstream end of a core gas flow passage (A) defined by radially inner and outer walls (72, 74), and at least a first compressor rotor blade (40) provided at an upstream end of the compressor arrangement (18, 20). The radially inner wall (72) of the core inlet (38) defines a first diameter (D INLET), and a root leading edge (84) of the first compressor rotor blade (40) defines a second diameter (D COMP). A first ratio (D INLET :D COMP) of the first diameter (D COMP) to the second diameter (D COMP) is greater than or equal to 1.4.

IPC 8 full level
F02K 3/06 (2006.01); **F04D 29/54** (2006.01)

CPC (source: CN EP US)
F01D 1/02 (2013.01 - US); **F02C 3/06** (2013.01 - CN); **F02C 3/107** (2013.01 - US); **F02C 7/04** (2013.01 - CN US); **F02C 7/36** (2013.01 - US); **F02K 3/06** (2013.01 - CN EP US); **F02K 3/068** (2013.01 - US); **F04D 29/321** (2013.01 - CN); **B64D 2033/0286** (2013.01 - US); **F04D 29/547** (2013.01 - EP US); **F05D 2220/32** (2013.01 - US); **F05D 2240/24** (2013.01 - US); **F05D 2250/51** (2013.01 - US); **F05D 2250/71** (2013.01 - EP US); **F05D 2260/40311** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP)

Citation (opposition)
Opponent : Raytheon Technologies Corporation
• US 2016131028 A1 20160512 - LAUER CHRISTOPH [DE], et al
• US 2016069270 A1 20160310 - SCHWARZ FREDERICK M [US], et al

Cited by
US12078126B2; EP3708850A1; CN112240246A; FR3104644A1; EP3708818A1; CN111692010A; US2023013650A1; EP3885552A1; EP3885553A1; EP3885555A1; EP3885554A1; EP3885556A1; US11519363B2; US11629668B2; US11459893B2; US12006835B2; EP4073369A1; WO2021116621A1; US11242155B2; US11584532B2; US12024301B2; US11346287B2; US11781491B2; US12071901B2; US12110845B2

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DOCDB simple family (application)
EP 18183848 A 20180717; CA 3013757 A 20180809; CN 201810923831 A 20180814; GB 201712993 A 20170814; US 201816103329 A 20180814